



**MYBUILDINGPERMIT.COM EPLAN
BUILDING APPLICATION CHECKLIST
MIXED USE, MULTI-FAMILY RESIDENTIAL, AND NONRESIDENTIAL
NEW CONSTRUCTION AND STRUCTURE ADDITIONS**

Prior to submittal, please make sure that all pre-application activity requirements have been completed. Contact the Planning Department at 425-587-3225 with any questions about which processes are required.

Architect's/Engineer's registration stamp must appear on plans and calculations if prepared by such professionals.

- ☐ Completed application for building permit (*one for each building, except for accessory structures. For information on what qualifies as an accessory structure, please contact the Building Department at 425-587-3600.*)
- ☐ If not shown on the plans, submit a completed Building Code Summary Worksheet.
- ☐ Legal description of property listed on plans

Complete Plan Set, including Site Plan (*maximum drawing size of 24" x 36" Exception: large buildings where scale exceeds 1/16"*). Plans to include the following:

- ☐ (A) Permanent stormwater retention system (include calculations within TIR)
- ☐ (B) Interim stormwater retention system
- ☐ (C) Survey of the property involved by a licensed surveyor
- ☐ (D) Landscaping plans
- ☐ (E) Cover sheet indicating: Occupancy Group, Type of Construction, Square Footage by Floor, and General Notes
- ☐ (F) A site plan drawn to 1"=20' scale showing:
 - ☐ (1) Property lines
 - ☐ (2) Location and dimensions of proposed building(s) including distance to property line
 - ☐ (3) Location and dimensions of existing structures
 - ☐ (4) Roof overhangs of existing and new buildings
 - ☐ (5) Locations of all curb cuts (access of public rights-of-way) including distances to adjacent intersections and existing fire hydrants, open ditch, culvert, pipes, etc.). Type of surface proposed and finished grades or profiles of driveways.
 - ☐ (6) Proposed location of sanitary sewer service line, water service line, storm drainage lines, and connection to existing systems.
 - ☐ (7) Parking facilities layout and lighting, including garbage and recyclable materials container locations and screening plan, handicap parking compliance, and emergency vehicle access.
 - ☐ (8) Existing topography at 5-foot intervals
 - ☐ (9) **Tree Retention Plan required.** (See handout). If the property does not have significant trees, please indicate.

NOTE: Applicant should check with the Department of Planning and Community Development to determine what tree retention requirements have been established for the subject property. All designated trees to be retained must be prominently marked and fenced, and the tree fencing inspection completed and signed off in the City's permit-tracking system prior to issuance of the building permit. Call 425-587-3225 to schedule this inspection, provide the Permit Application number and construction address, and allow 2 days time for this inspection to be completed and signed off.

- ☐ (10) Building and lot corner elevations, and midpoint elevation of each wall segment at existing grade
- ☐ (11) Elevation and location of datum point in the right-of-way
- ☐ (12) Water courses, wetlands, or other natural features
- ☐ (13) For multifamily include location and dimensions of common recreational open space
- ☐ (H) Average building elevation calculations (see attached handout)
- ☐ (I) Complete floor plan of each floor drawn to 1/4" scale showing compliance with IBC and WAC 51-30, including:
 - ☐ (1) Room size compliance with building code
 - ☐ (2) Required fire walls and doors
 - ☐ (3) Mechanical equipment locations. Structural design calculations are required by a licensed architect or engineer to verify the adequacy of the roof. Rooftop equipment must be screened to be architecturally compatible with the existing building.
 - ☐ (4) Plumbing fixture locations
 - ☐ (5) Dropped ceiling areas
 - ☐ (6) Stairway locations
 - ☐ (7) Door and window locations
- ☐ (J) Elevations of all sides of the building drawn to 1/4" or 1/8" scale. Information to be shown on elevations:
 - ☐ (1) Elevations of all sides of the building drawn to 1/4" or 1/8" scale showing building heights and where the average building elevation strikes the structure; existing and finish grade; and roof mounted mechanical equipment and screening.
- ☐ (K) Complete structural details and supporting calculations. Drawings to be of 1/4" or 1/8" scale. Include the following:
 - ☐ (1) Complete cross section
 - ☐ (2) Foundation plan. Show under-floor ventilation, access, and framing, if pertinent
 - ☐ (3) Floor and roof framing plans, including columns and shear walls
 - ☐ (4) Manufacturer and truss layout, if trusses are used
 - ☐ (5) Stairway details showing code compliance attributes, such as rise, run, handrails, headroom, etc.
 - ☐ (6) Detail guard rails around balconies, etc.
 - ☐ (7) Indicate how required structural and fire-resistive integrity will be maintained where penetrations will be made for electrical, mechanical, plumbing, and communication conduits, pipes, and similar systems.
- ☐ (L) Complete Washington State Energy Code Compliance Forms.
- ☐ (M) Lot Coverage Calculations - percentage of lot covered by structures, parking areas, and other impervious surfaces.
- ☐ (N) Geotechnical Report prepared by a professional engineer may be required if development will occur on or within 25 feet of a regulated slope or on an area containing soft compressible soils.
- ☐ (O) Complete Environmental Checklist (SEPA) and Traffic Impact Analysis, if not exempt, along with SEPA review fee (see Planning Department for more information).
- ☐ (P) Copy of Road Concurrency Test Notice from Public Works Department. (Exempt from concurrency if exempt for SEPA.) Road concurrency must be passed prior to submittal of permit application. (See Traffic Engineering Section of Public Works Department for more information.)
- ☐ (Q) Shoreline DNS

NOTE: Multiunit Residential Building or for Rehabilitative Construction The building department shall not issue a building permit for construction of the building enclosure of a multiunit residential building or for rehabilitative construction unless the building enclosure design documents

contain a stamped statement by the person stamping the building enclosure design documents in substantially the following form: "The undersigned has provided building enclosure documents that in my professional judgment are appropriate to satisfy the requirements of RCW [64.55.005](#) through [64.55.090](#)."

NOTE: You must contract with Sno-King/Waste Management N.W. for collection of construction waste. Please call 425-814-1695 for information. Kirkland Municipal Ordinance 16.08.030

NOTE: New Restaurant/ Food Facility Construction: Applicant is required to send two set of plans, drawn to scale and detailing establishment equipment to the King County Department of Public Health. Any questions regarding this requirement may be directed to Mike Bratcher at 206-296-9741 between 7:00 am and 3:30 pm, Monday through Friday. Stamped Health Department copy must be submitted to Building Department prior to issuance of permit.

QUESTION► Will this business be preparing or serving food or beverages, or making pet foods?

YES



NO

(Stop Here)

If **YES**, and you believe your business will produce less than 100 ppm combined fats, oils and grease you can contact City of Kirkland Public Works Wastewater Division to see if you qualify to be exempt from installing a grease removal device by providing an exemption affidavit. **Please provide a copy of Wastewater's approval with this application.**

-or-

If **YES**, and you agree that your business will produce more than 100 ppm combined fats, oils and grease you will have to install a properly sized grease removal device compliant with Chapter 10 of the Uniform Plumbing Code and Chapter 15.36 of the Kirkland Municipal Code. City of Kirkland Public Works Wastewater Division registers approved grease removal devices and provides education and training on their proper use. **Please provide a copy of Wastewater's approval with this application.**

For additional Wastewater information please contact:

City of Kirkland Public Works Wastewater

Mail – Public Works Wastewater, 123 5th Ave, Kirkland WA 98033

Physical Address – 915 8th St, Kirkland WA 98033

Email – bwallace@kirklandwa.gov

Telephone – 425-587-3909



CITY OF KIRKLAND PLANNING & COMMUNITY DEVELOPMENT

TREE RETENTION PLAN – Multifamily, Commercial, and Non-Residential

Tree retention requirements for multifamily, commercial and any other use other than residential, and related demolition and land surface modification applications are identified within this form. **These requirements are located in Section [95.30](#) of the Kirkland Zoning Code (KZC) and are summarized below.**

DEVELOPMENT ACTIVITY CHART

REQUIRED COMPONENTS

TREE INVENTORY AS DESCRIBED IN SECTION I. OF THE PERMIT SUBMITTAL CHECKLIST FOR:

<input type="checkbox"/> All significant trees on the subject property
<input type="checkbox"/> Significant trees potentially impacted by proposed development activity
SITE PLAN AS DESCRIBED IN SECTION II. OF THE PERMIT SUBMITTAL CHECKLIST TO INCLUDE:
<input type="checkbox"/> Surveyed tree locations if required by the Planning Official
<input type="checkbox"/> A final landscape plan showing retained trees
REQUIREMENTS IN SECTION III. OF THE PERMIT SUBMITTAL CHECKLIST SHALL BE PREPARED BY A QUALIFIED PROFESSIONAL AND APPLY TO:
<input type="checkbox"/> Significant trees potentially impacted by proposed development activity as determined by the Planning Official
<input type="checkbox"/> Proposed removal of trees with a high retention value in required landscaping areas
TREE RETENTION STANDARDS
<input type="checkbox"/> Retain and protect trees with a high retention value to the maximum extent possible ⁽¹⁾
<input type="checkbox"/> Retain and protect trees with a moderate retention value if feasible
<input type="checkbox"/> Preservation and maintenance agreements pursuant to KZC 95.51 are required for all remaining trees on the subject property
LANDSCAPING
<input type="checkbox"/> Preserved trees in required landscaping areas shall apply toward required landscaping requirements

(1) To retain trees with a high retention value, the applicant shall pursue, where feasible, applicable variations in the development standards of this code as outlined in KZC [95.32](#).

Helpful definitions to complete the tree plans described below:

1. **Significant Tree:** A tree that is at least 6 inches in diameter at breast height (DBH) (The diameter or thickness of a tree trunk measured at 4.5 feet from the ground).
2. **Qualified Professional:** An individual with relevant education and training in arboriculture or urban forestry, having two or more of the following credentials: 1) International Society of Arboriculture (ISA) Certified Arborist; 2) Tree Risk Assessor Certification (TRACE) as established by the Pacific Northwest Chapter of ISA (or equivalent); 3) American Society of Consulting Arborists (ASCA) registered Consulting Arborist; 4) Society of American Foresters (SAF) Certified Forester for Forest Management Plans; and for tree retention associated with a development permit a minimum of three years' experience working directly with the protection of trees during construction and have experience with the likelihood of tree survival after construction. A qualified professional must also be able to prescribe appropriate measures for the preservation of trees during land development.
3. **Limits of Disturbance:** The boundary between the protected area around a tree and the allowable site disturbance as determined by a qualified professional measured in feet from the trunk.

PERMIT SUBMITTAL CHECKLIST

Permit Submittal Requirements for Multifamily, Commercial, any other use other than residential, and related Demolition and Land Surface Modification Permits ***When identified in the Development Activity Chart, the following information is required for all permits in order for the application to be deemed complete. Incomplete applications will not be accepted.***

I. A tree inventory containing the following:

- ☐ A numbering system of all existing significant trees on the subject property (with corresponding tags on trees); the inventory must also include significant trees on adjacent property with driplines extending over the subject property line;
- ☐ Limits of disturbance (LOD) of all existing significant trees (including approximate LOD of off-site trees with overhanging driplines);
- ☐ Size (DBH);
- ☐ Proposed tree status (trees to be removed or retained);
- ☐ Brief general health or condition rating of these trees (i.e.: poor, fair, good, excellent, etc.);
- ☐ Tree type or species.

II. A site plan depicting the following:

- Location of all proposed improvements, including building footprint, access, utilities, applicable setbacks, buffers, and required landscaped areas clearly identified. If a short plat or subdivision is being proposed and the location of all proposed improvements cannot be established, a phased tree retention plan review is required as described in subsection (6)(a) of this section;
- Accurate location of significant trees on the subject property (surveyed locations may be required). The site plan must also include the approximate trunk location and critical root zone of significant trees that are on adjacent property with driplines extending over the subject property line;
- Trees labeled corresponding to the tree inventory numbering system;
- Location of tree protection measures;
- Indicate limits of disturbance drawn to scale around all trees potentially impacted by site disturbances resulting from grading, demolition, or construction activities (including approximate LOD of off-site trees with overhanging driplines);
- Proposed tree status (trees to be removed or retained) noted by an 'X' or by ghosting out;
- Proposed locations of any supplemental trees and any required trees in order to meet tree density or minimum number of trees as outlined in KZC [95.33](#).

III. An arborist report containing the following:

- A complete description of each tree's health, condition, and viability;
- A description of the method(s) used to determine the limits of disturbance (i.e., critical root zone, root plate diameter, or a case-by-case basis description for individual trees);
- Any special instructions specifically outlining any work proposed within the limits of the disturbance protection area (i.e., hand-digging, tunneling, root pruning, any grade changes, clearing, monitoring, and aftercare);
- For trees not viable for retention, a description of the reason(s) for removal based on poor health, high risk of failure due to structure, defects, unavoidable isolation (windfirmness), or unsuitability of species, etc., and for which no reasonable alternative action is possible must be given (pruning, cabling, etc.);
- Describe the impact of necessary tree removal to the remaining trees, including those in a grove or on adjacent properties;
- For development applications, a discussion of timing and installation of tree protection measures that must include fencing and be in accordance with the tree protection standards as outlined in KZC [95.34](#); and
- The suggested location and species of supplemental trees to be used when required. The report shall include planting and maintenance specifications pursuant to KZC [95.50](#) and [95.51](#).

For more details and information visit the Kirkland Zoning Code Chapter 95 online, at http://kirklandcode.ecitygov.net/CK_KZC_Search.html or contact the Planning Department at 425.587.3235.



**CITY OF KIRKLAND
DEPARTMENT OF PUBLIC WORKS
GRADING CHECKLIST**

The following is a list of items needed for review of a grading (Land Surface Modification) or building permit.

- ☐ 1. Use King County datum and indicate temporary or permanent benchmark used in survey.
- ☐ 2. Water meter location in right-of-way, size, and number (if City of Kirkland water).
- ☐ 3. Existing hydrant location, water main locations, and water main sizes.
- ☐ 4. New hydrant locations and City of Kirkland hydrant detail.
- ☐ 5. Standard water notes and details.
- ☐ 6. Show on the civil plans the PIV, double-check valve, and siamese connection for buildings that have fire sprinklers.
- ☐ 7. New line easements for water mains on private property.
- ☐ 8. Existing sewer main locations and sizes.
- ☐ 9. New sewer main locations and slopes with minimum pipe covers.
- ☐ 10. Side sewer locations and slopes with minimum pipe covers.
- ☐ 11. Proposed developer extensions.
- ☐ 12. Standard sewer notes and details.
- ☐ 13. Location of any existing septic tanks on the project site.
- ☐ 14. Storm drainage hydraulic calculations for 100-year storm released at .2 c.f.s. per acre, with a civil engineers stamp (use Kirkland Department of Public Works calculation form).
- ☐ 15. Temporary erosion control plan protecting adjacent property, streams, and city streets.
- ☐ 16. Standard erosion control notes and details.
- ☐ 17. Permanent storm detention system with access to both ends of the tank, including profile.
- ☐ 18. Control manhole and flow restrictor detail with elevations and orifice size.
- ☐ 19. Discharge of private storm water to public storm system.
- ☐ 20. All downspouts and yard drainage tight-lined to private storm system.
- ☐ 21. All footing drains tight-lined with positive drainage when building in wet areas.
- ☐ 22. All drainage from paved areas to catch basins with no drainage crossing sidewalks especially at driveway entrances.
- ☐ 23. A downstream storm system analysis for 1/8 mile if less than 1.25 acres; 1/4 mile if more than 1.25 acres.
- ☐ 24. 12-inch minimum pipe diameter in right-of-way for storm drainage with trash racks on all ditch inlets 12 inches or greater for both private and public systems.
- ☐ 25. All right-of-way drainage designed for future extension.
- ☐ 26. Standard storm drainage notes and details.
- ☐ 27. All sidewalks require handicap ramps at intersections.
- ☐ 28. Street improvements showing curb and gutter, sidewalk, planter strip, right-of-way width, street width, driveway locations, and right-of-way storm drainage.
- ☐ 29. Street cross section showing existing street width, saw-cut line, patch width, new street width, 18-inch curb and gutter, 4.5-foot planter strip, and 5-foot sidewalk.
- ☐ 30. An asphalt/base cross-section for any asphalt patching or paving.
- ☐ 31. Street widening will need a patch taper at the end of the improvements; a 5-to-1 taper for

entering traffic and a 10-to-1 taper for existing traffic.

- ☐ 32. Asphalt ramps will be needed on dead-end sidewalks to provide pedestrians access back out to street.
- ☐ 33. All existing utilities within the right-of-way, including power poles, vaults, and street lights should be shown on the plans.
- ☐ 34. Developers will be responsible for moving utilities in conflict with right-of-way improvements.
- ☐ 35. Standard right-of-way notes and details.
- ☐ 36. Per Notice of Approval, developer responsible for contacting Puget Power for street light design.
- ☐ 37. If water or sewer utilities are governed by Northshore Water and Sewer or Woodinville Water, a sewer and/or water availability letter is needed from the involved district.
- ☐ 38. Show all existing or new easements on the property, including the size and type.
- ☐ 39. A completed Department of Public Works Improvement Evaluation Packet. These required forms are available at the Public Works Website at www.kirklandwa.gov.
- ☐ 40. Do not build over existing utility lines.
- ☐ 41. Prior to issuance of a permit, any concomitant agreements required due to deferment of right-of-way improvements must be signed, notarized, and returned to the Department of Public Works.
- ☐ 42. All new and existing street signs should be located on the plans.
- ☐ 43. Indicate any restriping or new striping required in the right-of-way.
- ☐ 44. A report by a professional engineer (per Zoning Code Chapter 85) may be required if development will occur on or within 25 feet of a regulated slope or on soft compressible soils.

☐ Plans

Architect's/Engineer's registration stamp must appear on plans and calculations if prepared by such professionals.

1. Site Plan: An overall site plan (at a minimum scale of 20 feet equals 1 inch) showing the proposed structure in plan view indicating:

- ☐ a) **The property owner's name**, the Assessor's parcel number and the site address.
- ☐ b) **Map Scale and North Arrow**
- ☐ c) **All property lines, easements (utilities, access, etc.), and site dimensions** including bearings and distances. Make a clear distinction between proposed and existing features. Show the distances between buildings and from buildings to all property lines.
- ☐ d) **All streets and alleys, with street names.** Note the nearest cross street. Show all existing and/or proposed driveways including surface materials.
- ☐ e) **Front, side, and rear setbacks** measured from the property lines or vehicular access easements.
- ☐ f) **Location, dimensions and square footage** of all existing and proposed buildings. Make a clear distinction between any existing building and the proposed new construction. Show roof overhangs of existing and proposed buildings. Show any buildings to be demolished.
- ☐ g) **The use of each building.**
- ☐ h) **The height of:** fences, decks, retaining walls, rockeries and other similar elements. Retaining walls or rockeries may require a separate building permit.
- ☐ i) **Show existing utilities**, including the locations of sewer, water, electricity and gas lines, and any underground storage tanks, drainfields and reserve drainfield areas.
- ☐ j) **Existing and proposed topography at two-foot contour intervals** in relation to a benchmark within the adjacent public right-of-way. Also show said benchmark, which can be a sewer manhole cover or other fixed point approved by the Planning Department. Indicate finished grade and the elevation of the finished first floor or garage slab. Indicate slopes greater than 15% and the location of any fill areas.
- ☐ k) **Lot coverage and supporting calculations** (area of impervious surfaces) – including all buildings, walkways and driveway. Provide separate subtotals for buildings, driveways/parking areas and walkways/patios.
- ☐ m) **Tree Retention Plan – Major.** (See handout and checklist). If the property does not have significant trees, please indicate.
- ☐ n) **Creeks, streams, ponds, lakes, or wetlands on or within 100 feet of the subject property. NOTE:** If the Building or Planning official determines that the building site is in an environmentally sensitive area, additional information will be required (e.g., soils report, environmental checklist, hold harmless agreement, special inspection).
- ☐ o) An Erosion and Sedimentation Control (ESC) Plan is required, showing method and location of proposed ESC. You can obtain an example ESC plan from the Public Works Department.
- ☐ p) **Existing improvements within the right-of-way** showing:
 - 1) Sidewalk
 - 2) Curb or curb and gutter
 - 3) Storm drain pipe
 - 4) Catch basin
 - 5) Overhead and underground utility lines and power poles
- ☐ q) **Proposed or existing gas, water, electrical, septic, or sewer and storm drainage** locations and where they will connect to the public system in the right-of-way.
- ☐ r) **Existing ground elevations** at midpoint of wall segments and average building elevation calculations (see **Average Building Elevation Calculation** below).

2. Vicinity Plan A copy of an assessor's map, plat map, or a sketch showing a radius of 300 feet on all sides of the project site indicating the following:

- ☐ a) Lot location
- ☐ b) Location of nearest: catch basin, storm drainpipe, ditch curb or curb and gutter, sidewalk
- ☐ c) Pavement width of right-of-way
- ☐ d) Distance from pavement in right-of-way to property line

3. Building Plans (1/4 inch or 1/8 inch scale) showing:

- ☐ a) **Floor Plan:** Floor plan of each floor and basement indicating:
 - ☐ 1) Location of all wall and partitions, door sizes, and window sizes
 - ☐ 2) Location of all permanently installed equipment such as plumbing fixtures, water heaters, furnaces, appliances, and wood stoves
 - ☐ 3) Direction, size, and spacing of all floor and ceiling framing members
- ☐ b) **Elevation Plans:** Elevations of all sides of the building indicating: a) where the average building elevation strikes the building, b) finished grade, c) existing grade, d) elevation of highest point of roof, e) finished floor elevation of the main floor. (See elevation example below.)
- ☐ c) **Cross-Section Plans:** One cross section through exterior wall showing all details of construction from footing to highest point of roof (see typical cross section example). Submit a cross section of attic area utilizing trusses.
- ☐ d) **Foundation Plans:** Foundation plans indicating a) underfloor ventilation, b) access in framing, c) full dimensions of footings and walls, d) foundation steel (number and size of reinforcement);
- ☐ e) **Truss Layout Diagram:** Truss Layout diagram indicating a) the location of trusses and b) manufacturer being used;
- ☐ f) **Details:** Details indicating a) stairways, b) guardrails around balconies, etc., c) cantilevered beams, floor, or ceiling joists; submit calculations for cantilever situations.

- ☐ **Structural Engineering Calculations** - The structure must have a gravity and lateral-force-resisting designed by a Washington State Registered Structural Engineer. Structural engineering calculations must be submitted and all necessary design details must be incorporated into the plans. The Engineered plans and/or calculations must be signed by the Engineer.

☐ **BUILDING HEIGHT TABLE (Building Height Verification Form)**

☐ **Washington State Energy Code Compliance Forms**

Forms at: <http://www.energy.wsu.edu/BuildingEfficiency/EnergyCode>

- ☐ **Geotechnical Report**, also called a Soils report. If the Building or Planning official determines that the building site is in an environmentally sensitive area, additional information will be required (e.g., soils report, environmental checklist, hold harmless agreement, special inspection).

☐ **Stormwater Drainage Report/TIR.**

A hard copy and an electronic copy (pdf) of the Drainage Report/TIR are required for projects meeting the requirements for Small Project Type II, Targeted, and Full Drainage Reviews. Use the appropriate drainage report template depending on the project size and scope; the templates are available at the PW counter or in the FAQ section at:

http://www.kirklandwa.gov/depart/Public_Works/Storm_Surface_Water/Stormwater_Update.htm

☐ **Stormwater Low Impact Development Feasibility Evaluation Worksheet.**

This worksheet is required for all projects meeting the requirements for Small Project Type II, Targeted, and Full Drainage Reviews. The worksheet will help define the drainage design parameters for the project. The form is in Policy L-1 of the PW Pre-Approved Plans, and is available in the permit application packet, at the PW counter, or at:

http://www.kirklandwa.gov/depart/Public_Works/Development/Pre-Approved_Plans/LID_Storm_Facilities.htm

Note: The applicant must evaluate the site drainage, complete the Feasibility Worksheet, and present it with the building plans at intake, or the plans will not be accepted.

☐ **A Water Availability form by the water District if other than City Of Kirkland**

☐ **A Sewer Availability form by the Sewer District if other than City Of Kirkland**

☐ **A Septic System Approval By King County Health Department If Not Served By Sewer**

□ Average Building Elevation (ABE) Calculation (to be included on the site plan)

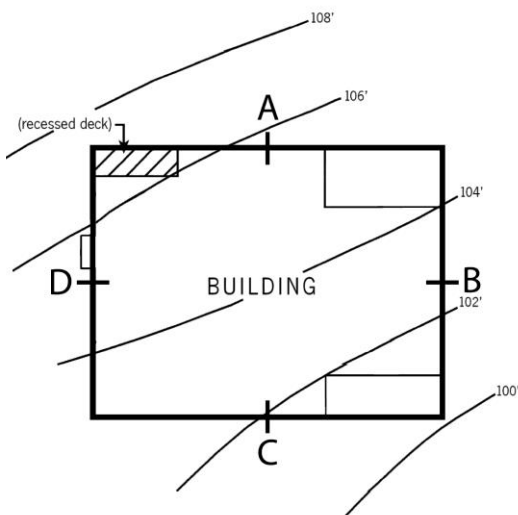
No part of a structure may exceed the maximum height above "Average Building Elevation" specified in the applicable use zone section of the Zoning Code except for minor elements of a structure as specified in Zoning Code Section 5.10.045 **defines Average Building Elevation as:**

"The weighted average elevation of the topography, prior to any development activity, either (1) under the footprint of a building as measured by delineating the smallest rectangle which can enclose the building footprint and then averaging the elevations taken at the midpoint of each side of the rectangle, or (2) at the center of all exterior walls of a building or structure."

Contact the Planning Department at 425-587-3225 for details. When a building or structure contains townhouses or other attached but otherwise independent building units the average building elevation is calculated separately for each unit.

Average Building Elevation Formula

$$\frac{(\text{Midpoint Elevations}) \times (\text{Length of Wall Segments})}{(\text{Total Length of Wall Segments})}$$



Calculating Average Building Elevation

$$\frac{(A \times a) + (B \times b) + (C \times c) + (D \times d)}{a + b + c + d} = \text{Average Building Elevation (ABE)}$$

Where A, B, C, D...= Existing Ground Elevation at Midpoint of Rectangle Segment*

And a, b, c, d...= Length of Rectangle Segment

CALCULATION EXAMPLE:

Midpoint Elevation	Rectangle Segment Length
A = 105.6	a = 47'
B = 102.5	b = 40'
C = 101.9	c = 47'
D = 105.2	d = 40'

$$\frac{(105.6)(47) + (102.5)(40) + (101.9)(47) + (105.2)(40)}{47 + 40 + 47 + 40} = \frac{18,060.5}{174} = 103.80 \text{ ABE}$$

Notes:

- 1) Rectangle shall not include those items allowed to extend into required yards through KZC 115.115(3)(d).
- 2) Include portion of the structure that are covered by roof in the ABE calculation even if they do not have walls. Cantilevered portions enclosing interior space must be included in the ABE calculation.
- 3) Sections of the structure that are below the existing grade and do not have a wall that extends above the existing grade, are not used in the ABE calculation. Building wall segments more than 4' in height above finished grade and enclosing interior space are included in the ABE calculation.
- 4) For additions, you must provide an average building elevation calculation for the entire structure.
- 5) Vents & chimneys may exceed the maximum height (for detached dwelling units)

Elevation Example of ABE

